

**SELF-EXPANDING STENT AND STENT DELIVERY SYSTEM  
FOR TREATMENT OF VASCULAR DISEASE**

Abstract

5           An integrated balloon catheter and self-expanding stent, and stent delivery system  
are provided for treating vascular diseases such as partially occluded blood vessels within  
the brain. The self-expanding stent is preferably mounted on an elongated core wire, is  
disposed within a delivery lumen of a balloon catheter and is held in a compressed state  
onto the elongated core wire by a pair of actuatable retaining rings. When the stent is  
10 properly positioned with a vessel, the actuatable retaining rings are activated to release  
the compressed stent to thereby permit the stent to expand within the vessel.